Department of Transportation
Olympia, Washington 98504

April 7, 2004

ATTENTION: All Bidders and Planholders

I-5
NORTH OF LAKEWAY I/C - PHASE 1A
NOISE WALLS AND SAFETY IMPROVEMENTS
F.A. IM-0055(223)

Addendum No. 2

The Special Provisions, Plans, and Proposal for this project are amended as follows:

Special Provisions

1. On page 59, line 26 is revised as follows:

   and will end 7-consecutive days later, on Monday at [~~8:00~~] 6:00 am.

2. On page 81, insert the following at line 19:

   A "Hazardous Material Survey of Parcel# 1-17691 located at 615 Lakeway Drive" is available for review by the bidder at the following address:

   Bellingham Project Engineer's Office
   Mark Russell, Project Engineer
   460 Stuart Road
   Bellingham, WA 98226-1204

3. On page 88, insert the following at line 18:

   Materials
   Section 5-05.2 is supplemented with the following:

   (BSP August 6, 2001)
   Rapid Cure Silicone Sealant
   Rapid cure silicone sealant shall be one of the following two products conforming to the following specifications:

   Dow Corning 902 RCS Joint Sealant
   The joint sealant shall be a rapid cure, 100 percent silicone, low modulus, self-leveling, cold applied, two part formulation, which is compatible with the surfaces to which it is applied. Rapid cure is defined as developing sufficient integrity within eight hours to accommodate both horizontal thermal movements and vertical movements at the joint.

   The joint sealant shall not be an acid cure sealant.

   The joint sealant shall conform to the following properties:

   As Applied

Extrusion rate grams/minute	MIL S 8802	200 to 550
Specific gravity	ASTM D 1475	1.25 to 1.35
Nonvolatile content	93 percent minimum	

As Installed

(at 25C, 50 percent relative humidity, and 48 hours cure)

Skin-over time	20 minutes maximum	
Joint elongation minimum	ASTM D 3583*	600 percent
Joint modulus 100% elongation	ASTM D 3583*	20 to 85 kPa at

*Section 14 modified as follows:
Pull Rate = 51 millimeters/minute
Specimen joint size = 13 mm by 13 mm by 51 mm

The primer shall be as recommended by the sealant manufacturer.

Watson Bowman Acme Two Part Silicone Sealant
The joint sealant shall be a cold applied, low modulus, two part formulation. When properly mixed, the joint sealant shall cure within four hours to form a well bonded seal.

The joint sealant shall conform to the following properties:

As Supplied (Each Component)

Extrusion rate milliliters/minute	ASTM C 1183	200 to 600
Leveling	ASTM C 639	Self leveling

As Installed

Tack free time maximum	ASTM C 679	60 minutes
Joint elongation percent minimum	ASTM D 5329[1, 2]	600
Joint modulus (min.) 100% elongation	ASTM D 5329[1, 2]	103 kPa at
Cure Evaluation hours maximum	ASTM D 5893	Pass at four
Ultimate elongation percent minimum	ASTM D 412 Die C[1]	1,000
Ult. stress (max.) 150% elongation	ASTM D 412 Die C[1]	172 kPa at
Shore Hardness, 00	ASTM C 661[1]	40 - 80
Specific Gravity	ASTM D 792[1]	1.20 - 1.40

[1] Seven day cure at 25C±2C and 50±5 percent relative humidity

[2] Specimen joint size = 13 mm by 13 mm by 51 mm

The Contractor shall deliver the joint sealant to the job site in the sealant manufacturer's original sealed container. Each container shall be marked with the sealant manufacturer's name and lot or batch number. Each lot or batch shall be accompanied by the manufacturer's Materials Safety Data Sheet (MSDS), and Certificate of Compliance, identifying the sealant manufacturer and the lot or batch number, and certifying that the materials conform to the specified requirements.

The backer rod shall be closed cell expanded polyethylene foam as recommended by the sealant manufacturer and approved by the Engineer. The diameter of the backer rod shall be as recommended by the sealant manufacturer for the expansion joint opening at the time of installation.

4. On page 88, insert the following at line 37:

Sealing Sawed Contraction Joints
Section 5-05.3(8)B is supplemented with the following:

(******)
Sealing Transverse and Longitudinal Joints
The Contractor shall clean and seal existing transverse and longitudinal joints where shown in the Plans.

Old sealant and incompressible material shall be completely removed from the joint to the depth of the new reservoir with a diamond blade saw. The removed sealant becomes the property of the Contractor and will be removed from the jobsite.

Removal of the old sealant for the entire depth of the joint is not required if the depth of the new reservoir is less than the depth of the existing joint.

Joints with joint tape do not require cleaning and sealing.

Immediately prior to sealing, the cracks shall be blown clean with dry oil-free compressed air. The joints shall be completely dry before the sealing installation may begin. Immediately following the air blowing, the sealant material shall be installed in conformance to manufacturer's recommendations and in accordance with Section 5-05.3(8)B. The top surface of the sealant shall be at least 7 millimeters below the surface of the pavement.

(******)
Clean and Seal Existing Concrete Random Cracks
The Contractor shall clean and seal existing concrete random cracks as staked by the Engineer.

All incompressible material shall be completely removed from the existing random crack to a depth of 19 millimeters.

Removal shall be done with a special crack sawing blade, sandblasting or other approved method that does not cause damage to the existing pavement.

Immediately prior to sealing, the cracks shall be blown clean with dry, oil-free compressed air. The top surface of the sealant shall be at least 7 millimeters below the surface of the pavement.

Measurement
Section 5-05.4 is supplemented with the following:

(******)
Sealing Transverse and Longitudinal Joints and Clean and Seal Existing Concrete Random Crack will be measured by the linear meter.

Payment
Section 5-05.5 is supplemented with the following:

(******)
"Sealing Transverse and Longitudinal Joints", per linear meter.
The unit contract price for "Sealing Transverse and Longitudinal Joints" shall be full pay to complete the work as specified including but not limited to removing old sealant, reshaping and preparing the new reservoir, and placing new sealant. Furnishing and operating tools and equipment, for which there is no pay item included in the proposal shall be included in the applicable items of work.

(******)
"Clean and Seal Existing Concrete Random Crack", per linear meter.
The unit contract price for "Clean and Seal Existing Concrete Random Crack" shall be full pay to complete the work as specified including but not limited to removing incompressible material, preparing and sealing existing random cracks. Furnishing and operating tools and equipment, for which there is no pay item included in the proposal shall be included in the applicable items of work.

5. On page 132, line 6 is revised as follows:

2. Discriminators shall be four-channel model ~~[254 units]~~ 700 Series. One is

6. On page 132, line 51 is revised as follows:

~~[*** 2070 ***]~~ N ~~[control]~~ controller equipment shall be used in this contract.

7. On page 133, lines 3 through 4 are revised as follows:

ASC23/2100 RM Econlite controller ~~[with 8 X 40 Eagle display and OASIS software]~~.

8. On page 133, lines 6 through 8 are deleted.

9. On page 139, line 29 is deleted and replaced with the following:

Contracting Agency at the following location:

WSDOT Signal Maintenance Yard
2600 Mcleod St.
Bellingham, WA 98225

10. On page 153, line 17 is revised as follows:

construction of the complete electrical system, <u>including the video detection system</u>, modifying existing systems, or both,

Plans

1. Plan sheets 11, and 12 are revised as shaded and noted on the attached sheets.

Proposal

1. On page 15: Item No. 188 is added.

Bidders shall furnish the Secretary of Transportation with evidence of receipt of this Addendum. This Addendum will be incorporated in the contract when awarded and when formally executed.

Harold Peterfeso, P.E.
State Design Engineer

Attachment:
Sheets 11, and 12 of the Plans (Rev. 4-05-04)
Page 15 of the Proposal (Rev. 4-05-04)